

**MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE**  
**SEMESTER END THEORY EXAMINATION**

**B.Sc.(Hons.) Agriculture**

Semester	: IV (New)	Term	: Second	Academic Year	: 2023-24
Course No.	: AHDS 242	Title	: Livestock Breeding and Nutrition		
Credits	: 2 (1+1)				
Day & Date	: Tuesday, 23.04.2024	Time	: 9:00 to 11:00 hrs.	Total Marks	: 40

- Note :
1. Solve ANY EIGHT questions from SECTION 'A'.
  2. All questions from SECTION 'B' are compulsory.
  3. All questions carry equal marks.
  4. Draw neat diagram wherever necessary.

**SECTION 'A'**

- Q.1 What is meant by Chromosomal Aberration? Give the classification of chromosomal aberrations and describe in short translocation and deletion of chromosome.
- Q.2 Differentiate between Mitosis and Meiosis.
- Q.3 Enlist various systems of breeding and differentiate important points between Close breeding and Line breeding.
- Q.4 What is meant by Selection? Enlist various basis and methods of selection and describe in short Tandem method of selection.
- Q.5 What is Hardy-Weinberg law? Enlist four steps of proof of Hardy-Weinberg law with constancy of gene frequency and give the properties of Hardy-Weinberg law.
- Q.6 Give the classification of feed-stuffs with suitable examples and write down in short about unconventional feed stuffs.
- Q.7 Define Nutrition. Enlist six major feed nutrients and important functions of Protein.
- Q.8 Describe in short functions of various organs of cattle digestive system.
- Q.9 Write about enrichment of low quality roughages. Describe in short about Urea Molasses Mineral Block (UMMB).
- Q.10 Write short notes on (Any Two):
- a) Variance      b) Feeding Standards      c) Silage      d) Spermatogenesis

**SECTION 'B'**

- Q.11 Define the following terms:
- 1) Half sib      2) Balance Ration      3) Repeatability      4) Digestible energy
- Q.12 Choose the correct answer-option:
- 1) Sudden change in the structure of gene is known as \_\_\_\_\_.  
a) Migration      b) Mutation      c) Selection
- 2) \_\_\_\_\_ is the byproduct obtained from sugar industry.  
a) Silage      b) Molasses      c) Brains
- 3) \_\_\_\_\_ is known as the 'Father of Genetics'.  
a) Mendel      b) Muller      c) Khurana
- 4) Milk fever is caused due to the deficiency of \_\_\_\_\_.  
a) Calcium      b) Copper      c) Cobalt

